



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/589,449	06/07/2000	Arda Akman	12096RNUS01U	9103

27820 7590 06/03/2004

WITHROW & TERRANOVA, P.L.L.C.
P.O. BOX 1287
CARY, NC 27512

EXAMINER

PARTON, KEVIN S

ART UNIT	PAPER NUMBER
----------	--------------

2153

DATE MAILED: 06/03/2004

18

Please find below and/or attached an Office communication concerning this application or proceeding.

9

Office Action Summary

Application No.

09/589,449

Applicant(s)

AKMAN, ARDA

Examiner

Kevin Parton

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7, 9, 11, 13, 15 and 17-21 is/are rejected.
- 7) ☒ Claim(s) 4, 6, 8, 10, 12, 14 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 03/17/2004 have been fully considered but they are not persuasive. Please see the following reasons and the new grounds of rejection below.
2. The applicant provides the following arguments, in summary:
 - a. On page 2, paragraph 5 and page 3, paragraph 1, the applicant argues that there is nothing in the references that "teaches or suggests digging into the protocol stack to find the IP address within the control protocol message and translating this buried IP address".
 - b. On page 3, paragraph 2, the applicant states that in the telephonic interview mailed 03/04/2004 (paper #16), "the Examiner indicated that he could see the difference between the claimed invention" and the previous rejection and that "claim 1 as presented defined over the rejection of record."
 - c. On page 3, paragraph 3, the applicant again points out limitations of the claims and states that the applied references do not teach or suggest these elements.

All further arguments are analogous to these summarized arguments.

3. Regarding argument (a), it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Specifically, nothing in the claims points out that the IP address to be translated resides within a specific "layer" of the control protocol message. Further, the applicant claims on page 2, paragraph 2 that control protocol messages fall within layer 6 of the TCP/IP protocol stack, however, the TCP/IP protocol stack only has 4 layers (Link, Network,

Art Unit: 2153

Transport, and Application). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

4. Regarding argument (b), the Examiner disagrees with the statements made by the applicant. Specifically, the Examiner points to the Interview Summary (paper #16). The Examiner did not agree that the current claims would overcome the rejection of record. It was requested that the applicant's arguments be provided in writing so that the Examiner could do further research into the nature of control protocol messages. Upon further examination and consideration, it has been determined that the arguments are not persuasive.

5. Regarding argument (c), the applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections. Specifically, the applicant must point out why the applied references do not teach the claimed features instead of just stating features and asserting that they are not provided by the applied references.

6. All further arguments are not persuasive for at least the reasons applied to arguments (a), (b), and (c).

Allowable Subject Matter

7. Claims 4, 6, 8, 10, 12, 14, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 2, 7, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al. (USPN 6,381,646).

10. Regarding claim 1, Zhang et al. (USPN 6,381,646) teach a system for translating IP addresses within control protocol messages, the messages originating and terminating in different IP networks, comprising means for:

- a. Receiving a control protocol message from a node on a first IP network
(column 6, line 42).
- b. Translating an IP address within the control protocol message from the IP address associated with the first IP network to an IP address associated with a second IP network, the means for translating an IP address within the control protocol message being positioned in a device within the first IP network
(figure 7; column 6, line 65 – column 7, line 7; column 4, lines 58-62).
- c. Routing the control protocol message to a node on said second IP network
(column 7, lines 3-4).

Art Unit: 2153

11. Regarding claim 2, Zhang et al. (USPN 6,381,646) teach all the limitations as applied to claim 1. They further teach means wherein the translation is network address translation (NAT) (column 6, line 65 – column 7, line 3).

12. Regarding claims 7 and 9, Zhang et al. (USPN 6,381,646) teach a system for translating IP addresses within control protocol messages exchanged between a node on a first IP network and a node on a second IP network with means for:

- a. Receiving a control protocol message from a node on a second IP network, the control protocol message including an IP address associated with the second IP network. (column 6, line 42).
- b. Translating the IP addresses associated with the second network included within the control protocol message to an IP address associated with the first IP network, wherein the translating occurs at a device within the first IP network (figure 9; column 6, line 65 – column 7, line 7; column 4, lines 58-62).
- c. Routing the control protocol message to a node on the first IP network (figure 9; column 7, lines 3-4).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2153

14. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. (USPN 6,381,646) in view of Cave et al. (USPN 6,404,746).

15. Regarding claim 3, although the system disclosed by Zhang et al. (USPN 6,381,646) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means wherein the node on the first IP network is a media gateway and the node on the second IP network is a media gateway controller.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Zhang et al. (USPN 6,381,646), as evidenced by Cave et al. (USPN 6,404,746).

In an analogous art, Cave discloses a system with multiple communicating networks wherein the node on a first IP network is a media gateway and the node on a second IP network is a media gateway controller (figure 2). Note that in the reference, gateways and a gatekeeper are used. These can communicate as media gateways and media gateway controllers.

Given the teaching of Cave et al. (USPN 6,404,746), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing the communication of media gateways and media gateway controllers. These are common network nodes that may be available on any two communicating networks. They benefit the system by providing service for multimedia communication including Internet telephony.

16. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. (USPN 6,381,646) in view of Cave et al. (USPN 6,404,746) and Morris et al. (USPN 6,496,851).

Art Unit: 2153

17. Regarding claim 5, Zhang et al. (USPN 6,381,646) teach a system for translating IP addresses within control protocol messages exchanged between a node on a first IP network and a node on a second IP network comprising:

- a. A port having an IP address associated with said first IP network, said port for receiving a control protocol message from the first node intended for the second node, the control protocol message including an IP address associated with said second IP network (figure 3).
- b. A Network Address Translator for translating the IP address associated with said first IP network included within the control protocol message to an IP address associated with said second IP network (figure 7; column 6, line 65 – column 7, line 7).
- c. A routing component for routing the control protocol message to the media gateway controller (column 7, lines 3-4).

Although the system disclosed by Zhang et al. (USPN 6,381,646) shows substantial features of the claimed invention, it fails to disclose means wherein:

- a. The first node is a media gateway and the second node is a media gateway controller.
- b. The translation takes place via a firewall.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Zhang et al. (USPN 6,381,646), as evidenced by Cave et al. (USPN 6,404,746) and Morris et al. (USPN 6,496,851).

Art Unit: 2153

In an analogous art, Cave et al. (USPN 6,404,746) discloses a system for internetwork communication wherein:

- a. The first node is a media gateway and the second node is a media gateway controller (figure 2).

Given the teaching of Cave et al. (USPN 6,404,746), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing the use of media gateway and media gateway controller nodes. This benefits the system by including well-known nodes and message types that are specially suited for media data types.

In an analogous art, Morris et al. (USPN 6,496,851) disclose a system for internetwork communication wherein translation is implemented via a firewall (column 10, lines 48-54).

Given the teaching of Morris et al. (USPN 6,496,851), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing the translation of addresses within or behind the firewall. This benefits the system by protecting the address translation server, which would necessarily contain information on the structure of the IP network that may be sensitive.

18. Claims 11, 13, 15, and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. (USPN 6,381,646) in view of Morris et al. (USPN 6,496,851).

19. Regarding claims 11, 13, and 15, Zhang et al. (USPN 6,381,646) teach a system for translating IP addresses within control protocol messages sent between two IP networks with means for:

- a. Receiving control protocol messages on a first IP network (figure 3).

Art Unit: 2153

- b. Offloading the control protocol messages to a server (column 4, lines 58-62; column 5, lines 52-54).
- c. Routing control protocol messages to a node on a second IP network (column 7, lines 3-4).
- d. Translating IP addresses within a control protocol message from IP addresses associated with the first network to IP addresses associated with the second network (figure 7; column 6, line 65 – column 7, line 7).
- e. The server positioned within the first IP network (column 4, lines 58-62)

Although the system disclosed by Zhang et al. (USPN 6,381,646) shows substantial features of the claimed invention, it fails to disclose means wherein:

- a. The system includes a firewall for receiving messages.
- b. The address translation server is behind the firewall.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Zhang et al. (USPN 6,381,646), as evidenced by Morris et al. (USPN 6,496,851).

In an analogous art, Morris et al. (USPN 6,496,851) disclose a system for internetwork communication wherein:

- a. The system includes a firewall for receiving messages (column 10, lines 48-54).
- b. Translation occurs behind a firewall (column 10, lines 48-54)

Given the teaching of Morris et al. (USPN 6,496,851), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al.

Art Unit: 2153

(USPN 6,381,646) by employing the translation of addresses via the firewall. This benefits the system by protecting the address translation server, which would necessarily contain information on the structure of the IP network that may be sensitive. Please note that the address translation of Morris et al. (USPN 6,496,851) is protected by a firewall and can thus be considered “behind” the firewall.

20. Regarding claim 17, Zhang et al. (USPN 6,381,646) teach all the limitations as applied to claim 5. They further teach means wherein the port is adapted to listen for a Service Change message to determine that a new media gateway is becoming available (figure 9). Please note that in the reference, the port listens for packets. A packet could be any type of message and if from a new host, would show that a new media gateway is available.

21. Regarding claim 18, Zhang et al. (USPN 6,381,646) teaches all the limitations as applied to claim 17. They further teach means wherein the network address translator is adapted to place an IP address of the new media gateway in a NAT table of IP addresses (figure 5; figure 10).

Note that NAT addresses are stored in a table in the reference.

22. Regarding claims 19, 20, and 21, although the system disclosed by Zhang et al. (USPN 6,381,646) (as applied to claims 1, 7, and 9) shows substantial features of the claimed invention, it fails to disclose means wherein address translation takes place via one of: a firewall for the first IP network, a router for the first IP network, and a server positioned within the first IP network behind a firewall.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Zhang et al. (USPN 6,381,646), as evidenced by Morris et al. (USPN 6,496,851).

Art Unit: 2153

In an analogous art, Morris et al. (USPN 6,496,851) disclose a system for internetwork communication wherein address translation takes place via one of: a firewall for the first IP network, a router for the first IP network, and a server positioned within the first IP network behind a firewall (column 10, lines 48-54).

Given the teaching of Morris et al. (USPN 6,496,851), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Zhang et al. (USPN 6,381,646) by employing address translation at or “behind” a firewall. This benefits the system by protecting the address translation server, which would necessarily contain information on the structure of the IP network that may be sensitive. Please note that the address translation of Morris et al. (USPN 6,496,851) is protected by a firewall and can thus be considered “behind” the firewall.

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see Pai et al., they teach a system wherein address translation takes place in layer 6 of the OSI model.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Parton whose telephone number is (703)306-0543. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

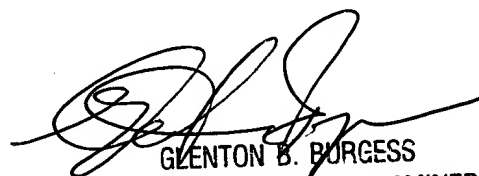
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703)305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2153

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Parton
Examiner
Art Unit 2153

ksp



GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100